

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant	Marco Steiger et al.
Application No. 09/917,998	Filing Date July 30, 2001
Title of Application:	Material Removing Tool
Confirmation No. 1503	Art Unit: 3723
Examiner	Shantese L. McDonald

Via EFS-Web
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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

APPEAL BRIEF

Sir:

This is an appeal from the final rejection of claims 1- 9, 13-17 and 25 of the Office Action dated 24 November 2009. This application was filed 30 July 2001. Appellant submits this Appeal brief pursuant to 35 U.S.C. § 134 and 37 C.F.R. § 1.191 in furtherance of the Notice of Appeal filed in this case on 24 February 2010. The required fee was electronically submitted.

I. REAL PARTY IN INTEREST

The real parties in interest are the assignees of the present application, namely MAROC, GmbH, a Corporation organized and existing under the laws of Switzerland and having its principal place of business at Balierestraße 29, CH 8500 Frauenfeld, Switzerland, and C. & E. Fein GmbH, a Corporation organized and existing under the laws of Germany and having its principal place of business at Hans-Fein-Strasse 81, D 73529 Schwäbisch-Gmünd-Bargau, Germany. The assignment was recorded on 30 March 2006, Reel/Frame 016730/0728 and 017389/0086.

II. RELATED APPEALS AND INTERFERENCES

Appellant filed an appeal in connection with the present application on 12 September 2003 (Appeal No. 2005-1001), which was dismissed on 7 April 2005 due to Appellant's filing of a Request for Continued Examination (RCE) under 37 CFR § 1.114. Appellant is not involved in any interferences which are related to this proceeding.

III. STATUS OF CLAIMS

Claims 1-9, 13-17 and 25 are pending in this application, stand finally rejected, and are the subject of the instant appeal. Copies of these claims are attached hereto in the Claims Appendix. Claims 10-12 and 18-24 have been cancelled. The last (emphasis by the undersigned attorney) final rejection is dated 24 November 2009.

IV. STATUS OF AMENDMENTS

No amendments have been made since issuance of the outstanding Final Office Action dated 24 November 2009.

V. SUMMARY OF CLAIMED SUBJECT MATTER

One feature of the invention resides in the provision of a tool (such as the tool 11 shown in Figs. 1 to 4) which serves to make cuts in workpieces (e.g., in workpieces made at least in part of wood, plastic or metallic or concrete material), namely to make cuts which are bounded by walls. Certain typical examples of cuts which can be obtained by resorting to the tool of the present invention are discussed in the paragraph bridging the pages 17-18 of Appellants' specification. The tool 11 can be manipulated by resorting to a manually operable apparatus (such as the apparatus 1 of Fig. 1) having a power-driven output shaft 7 which is arranged to oscillate about a predetermined axis A. Further, the tool 11 includes a fastener 9 attaching the tool to the output shaft, wherein the fastener has a thickness d such as is evident from Fig. 1. The heretofore outlined features of the tool 11 are pointed out in the preambles of the independent claims 1 and 25.

The independent claims 1 and 25 are directed to a tool and a manually operable material removing apparatus, respectively. These claims are summarized below.

Claim 1

The tool 11 of Figs. 1-4 comprises an elongated member 15 (e.g., a substantially plate-like member) having (See, e.g., page 14, line 17 – page 15, line 18)

(a) a rearward first section (the upper section, as viewed in Fig. 3) which includes a hole extending through the first section and is arranged to be mounted (such as by the tool fastener 9 of Fig. 1) on the output shaft 7 of the apparatus 1 so that the member 15 extends in a direction (substantially horizontally, as viewed in Fig. 1) which is at least substantially normal to the predetermined axis A, and (See, e.g., page 14, line 2 – page 15, line 18)

(b) a forward second section (namely the lower section of the member 15, as viewed in Fig. 3) which is remote from the first section and includes at least one substantially straight cutting edge 13 which is at least substantially normal to the aforementioned direction. The elongated member comprises a step 17 having a length at least equal to the thickness d of the fastener 9 (such as the tool of Fig. 4) wherein the step is configured so that the first and second sections of the elongated member extend substantially parallel to each other, so that a plane

substantially normal to said predetermined axis and defined by the second section is further from the manually driven apparatus (such as shown in phantom view of Fig. 1) than a plane substantially normal to said predetermined axis defined by the first section. The plane defined by the second section is closer to the workpiece, when the tool is in use, than the plane defined by the first section, and the cutting edge extends in the plane defined by the second section. The tool is arranged to make in a workpiece (e.g., in or adjacent a door- or window frame) a cut having a width which is a function of (i.e., dependent upon) a plurality of parameters including: (i) the extent of oscillatory movement $H/2$ of the output shaft 7, (ii) the distance L from the axis A to the cutting edge 13, and (iii) the length B of the cutting edge 13. (See, e.g., page 14, line 17 – page 15, line 18).

As pointed out, for example, in lines 14-17 on page 7 of the specification, the improved tool can perform a cutting action in a plane which is parallel to a surface of a workpiece and thus to form rectangular recesses or cuts even in the corners of workpieces.

Claim 25

A manually operable material removing apparatus 1 includes a power-driven output shaft 7 arranged to oscillate about a predetermined axis A , a tool 11 for making in workpieces cuts having predetermined widths and bounded by walls, and a fastener 9 attaching said tool 11 to the output shaft 7, the fastener 9 having a thickness. (See, e.g., page 14, lines 2-16; Fig. 1).

The tool 11 of Figs. 1-4 comprises an elongated member 15 (e.g., a substantially plate-like member) having (See, e.g., page 14, line 17 – page 15, line 18)

(a) a rearward first section (the upper section, as viewed in Fig. 3) which includes a hole extending through the first section and is arranged to be mounted (such as by the tool fastener 9 of Fig. 1) on the output shaft 7 of the apparatus 1 so that the member 15 extends in a direction (substantially horizontally, as viewed in Fig. 1) which is at least substantially normal to the predetermined axis A , and (See, e.g., page 14, line 2 – page 15, line 18)

(b) a forward second section (namely the lower section of the member 15, as viewed in Fig. 3) which is remote from the first section and includes at least one substantially straight cutting edge 13 which is at least substantially normal to the aforementioned direction. The

elongated member comprises a step 17 having a length at least equal to the thickness d of the fastener 9 (such as the tool of Fig. 4) wherein the step is configured so that the first and second sections of the elongated member extend substantially parallel to each other, so that a plane substantially normal to said predetermined axis and defined by the second section is further from the manually driven apparatus (such as shown in phantom view of Fig. 1) than a plane substantially normal to said predetermined axis defined by the first section. The plane defined by the second section is closer to the workpiece, when the tool is in use, than the plane defined by the first section, and the cutting edge extends in the plane defined by the second section. The tool is arranged to make in a workpiece (e.g., in or adjacent a door- or window frame) a cut having a width which is a function of (i.e., dependent upon) a plurality of parameters including: (i) the extent of oscillatory movement $H/2$ of the output shaft 7, (ii) the distance L from the axis A to the cutting edge 13, and (iii) the length B of the cutting edge 13. (See, e.g., page 14, line 17 – page 15, line 18).

As pointed out, for example, in lines 14-17 on page 7 of the specification, the improved tool can perform a cutting action in a plane which is parallel to a surface of a workpiece and thus to form rectangular recesses or cuts even in the corners of workpieces.

VI. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL

The issues to be reviewed by the Board include:

1) Whether claims 1-3, 6-9, 13-17 and 25 are unpatentable under 35 U.S.C. § 103(a) over U.S. Patent 6,022,353 to Fletcher et al. in view of U.S. Patent 5,306,285 to Miller et al. and U.S. Patent 5,280,676 to Fieni; and

2) Whether claims 4 and 5 are unpatentable under 35 U.S.C. § 103(a) in view of the combined teachings of Fletcher, Miller and Fieni in view of U.S. Patent 6,058,923 to Arntz et al.

VII. ARGUMENTS

Each of the claims 1-9, 13-17 and 25 which are active in this case stand finally rejected under 35 U.S.C. § 103(a) as being unpatentable over Fletcher in view of Miller and Fieni or Fletcher in view of Miller, Fieni and Arntz. Claims 1-9, 13-17 and 25 are presented in numerical order. Claims 1 and 25 are independent claims.

Claims 1 and 25

Rejection under 35 U.S.C. § 103(a)

Claim 1 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Fletcher in view of Miller and Fieni.

Claim 25 is assumed to be rejected under 35 U.S.C. § 103(a) as being unpatentable over Fletcher in view of Miller and Fieni.

Claim 1 is directed to a tool for making in workpieces cuts having predetermined widths and bounded by walls, in combination with a manually operable apparatus having a power driven output shaft arranged to oscillate about a predetermined axis and a fastener attaching said tool to the output shaft, the fastener having a thickness, said tool comprising:

an elongated member having a rearward first section, with a hole extending through said first section and having a closed rear wall formed by material from which said first section is made, said hole being configured to be mounted on said output shaft with the fastener so that the member extends in a direction at least substantially normal to said predetermined axis; and

a forward second section remote from said first section and including at least one at least substantially straight elongated cutting edge at least substantially normal to said direction and arranged to make in a workpiece a cut having a width which is a function of the extent of oscillatory movement of said output shaft, of the distance from said axis to said cutting edge and of the length of said cutting edge;

wherein said elongated member comprises a step of finite length at least equal to the thickness of the fastener intermediate said first and second sections thereof;

wherein said step of finite length is configured so that the first and second sections of said elongated member extend substantially parallel to each other, so that a plane substantially normal to said predetermined axis defined by said second section is further from the manually driven apparatus than a plane substantially normal to said predetermined axis defined by said first section, whereby the plane defined by said second section is closer to the workpiece during use of the tool than is the plane defined by said first section, and so that said cutting edge extends in the plane defined by said second section.

Claim 25 is directed to a manually operable material removing apparatus comprising a power-driven output shaft arranged to oscillate about a predetermined axis, comprising a tool for making in workpieces cuts having predetermined widths and bounded by walls and a fastener attaching said tool to the output shaft, the fastener having a thickness, said tool comprising the same features and elements of claim 1, above.

An invention is not patentable "if the differences between the subject matter sought to be patented and the prior art are such that subject matter over all would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains". 35 U.S.C. § 103(a).

"To establish a prima facie case of obviousness a three-prong test must be met. First, there must be some suggestion or motivation, either in the references or in the knowledge generally available among those of ordinary skill in the art, to modify the reference. Second, there must be a reasonable expectation of success found in the prior art. Third, the prior art reference must teach or suggest all the claim limitations. In re Vaeck, 947 F.2d 488 (Fed.Cir. 1991). See M.P.E.P. § 2143. This rule has recently been clarified as being flexible in allowing a reason to combine. KSR Int'l Co. v. Teleflex Inc., 550 U.S. 398 WL 1237837 (2007)."

The failure of the prior art to satisfy any single factor results in the failure of the prior art to obviate the present claims.

For a claim to be rejected as obvious, the Office is required to determine the scope in content of the prior art, ascertain the differences between the claimed invention and the prior art, and resolve the level of ordinary skill in the art. *KSR Int'l Co. v. Teleflex Inc.*, 127 S.Ct. 1727 (2007); M.P.E.P. § 2141, citing *Graham v. John Deere Company*, 383 U.S. 1 (1966). This analysis must be set forth explicitly. *KSR Int'l Co. v. Teleflex Inc.* 127 S.Ct. 1727 (2007). When considering the prior art, the Office is required to consider the prior art as a whole, and may not disregard portions of the art which show that an invention is not obvious. *W.L. Gore & Associates, Inc.* 721 F.2d 1540 v. *Garlock, Inc.* 721 F.2d 1540 (Fed. Cir. 1983).

Additionally, it is important to guard against the use of hindsight when evaluating whether a claim is obvious. E.g., *KSR Int'l Corp. v. Teleflex Incorporated*, 127 S.Ct. 1727, 1741 (2007). A factfinder either should be aware, of course, of the distortion caused by hindsight bias and must be cautious of arguments reliant upon ex post reasoning." As a guard against hindsight courts "have identified certain scenarios in which it is improper to reject a claim as obvious. For example, a claim cannot properly be rejected as obvious when the principle of operation of the prior art will need to be modified to obtain the claimed invention. In *re Ratti*, 270 F.2d 810 (CCPA 1959) (cited in M.P.E.P. 2143.01 for the proposition that "if the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the reference are not sufficient to render the claims prima facie obvious.") Similarly, if a prior art reference teaches away from the claimed invention, then the claimed invention is not obvious over that prior art. See M.P.E.P. § 2145 citing in *re Grasselli*, 713 F.2d 731 (Fed. cir. 1983). Given these standards, the Office's rejections under 35 U.S.C. § 103(a) cannot be sustained and must be reversed for the reasons and set forth below.

There is no Suggestion or Motivation to Modify the Reference

As already has been recognized by the Examiner, neither Fletcher nor Miller discloses, teaches or suggests a stepped configuration, which is why the Examiner has cited Fieni. Thus, clearly neither Fletcher nor Miller can disclose a step configuration having the precise features as defined in claim 1. Applicant respectfully submits that Fieni also does not disclose, teach or suggest these features, particularly in a manner that would obviate claim 1.

It is respectfully submitted that Fieni is not directed to a tool for making workpiece cuts in combination with an apparatus having a power driven output shaft that oscillates about an axis. By contrast, the tool according to Fieni is hand-driven only. In addition, Fieni discloses a hand tool that includes a blade and a handle for removing shingles and nails from a roof. Fieni discloses that on a front edge of the blade there is a first plurality of teeth for a removing shingles and nails on a forward manual stroke of the hand tool along the roof. On the rear edge of the blade, there is a second plurality of teeth for removing nails on a backward stroke of the hand tool along the roof. See column 2, lines 47-54.

The nature of Fieni reveals it is directed to a totally different purpose than is the present invention, namely to facilitate removal of nails and shingles from a roof. Fieni discloses the removal of the nails from the wood, and never reveals that the nails shall be cut with his tool, particularly in an oscillatory manner. To the contrary, Fieni teaches that cutting the roofing nails is very undesirable (col. 1, line 34-col. 2, lines 20).

Accordingly, the step incorporated into the tool of Fieni has a completely different effect than the step 17 according to claims 1 and 25. As stated above, the step 136 according to Fieni is used to facilitate the drawing of nails and shingles out of the wood. More specifically, the step 136 of Fieni is configured such that the plane defined by the second section 138 is further from the workpiece during use in order to create a slot when tapered to accommodate the body of the nail (as shown in Fig. 7) in order to facilitate removal of the nail intact. This is opposite the claimed arrangements.

Appellant respectfully submits that if the step 136 was modified in a manner that would satisfy claims 1 and 25 (i.e., such that the second section 138 is closer to the work piece during use), shearing of the nail heads would almost be guaranteed, a result that is directly contrary to the main objective of Fieni (the main object being not to shear off the nail heads, but to remove the nails intact). Applicant respectfully submits that this is a classic case where the prior art reference explicitly and repeatedly teaches away from the modifications necessary to arrive at the claimed invention.

On the other hand, the step according to the present invention is used to allow a better cutting operation, in particular directly along a plane surface, and to allow cutting under geometrically very narrow conditions without interference by the fastener.

Given this completely different arrangement and function of the step, and the express teaching away from the claimed step in Fieni, applicant respectfully submits a person skilled in the art would never contemplate to include the step known from Fieni in a tool known from Fletcher or Miller in the precise manner claimed, absent using the present application as a roadmap.

The Prior Art reference(s) Do Not Teach Or Suggest All The Claim Limitations

A further point of contention regarding claims 1 and 25 is the failure in the previous Office Actions to recognize the claimed limitations of the fastener for attaching the tool to the output shaft, wherein the fastener has a thickness, and wherein the elongated member comprises the step of finite length at least equal to the thickness of the fastener. The previous two Office Actions provided no prior art reference which would disclose or suggest a fastener according to claims 1 and 25. Instead, the Office Actions, such as page 5, lines 2-6 and 16-19 of the Office Action of 24 November 2009, state simply that "the added limitation claims that the fastener has predetermined thickness. This is an open ended limitation, since the fastener has not been claimed and a specific thickness has not been claimed." (emphasis added) And, in reference to the newly added limitation that the step is at least equal to the thickness of the fastener, this is also an open ended limitation, since the fastener has not been claimed, a thickness has not been defined." (emphasis added)

The appellant has adjusted the language of claims 1 and 25 to include the description of the limitations of the fastener and step in order to make it clear that these limitations are intended to be claimed and form an integral part of the claimed arrangement. These limitations were provided in both the body of the claims, and are now included in the preamble.

MPEP section 2111.02 provides that "If the claim preamble, when read in the context of the entire claim, recites limitations of the claim, or, if the claim preamble is "necessary to give life, meaning and vitality "to the claim, than the claim preamble should be construed as if in the balance of the claim." *Pitney Bowes, Inc. v. Hewlett Packard Company*, 182 F.3d 1298, 1305.

Page 5, lines 18-19 of the Office Action of 24 November 2009 states that "this limitation can be met as a manner of obvious design choice." (emphasis added) The appellant must respectfully disagree. The fastener having a thickness, and the step which is at least equal to the thickness of the fastener do not provide a mere design quality to the claimed device. To the contrary, the claimed arrangement provides functional limitation, in that the forward second section of the tool is able to properly function in the plane along which it extends. A fastener that is thicker than the step between the first section and second section of the tool would prevent the second section from being normal to a planar surface for the purpose of making in work pieces cuts having predetermined widths and bounded by walls, as provided in claims 1 and 25. This corresponds to the stated object of the invention wherein "it is now possible to perform a cutting action in a plane which is parallel to a surface of the work piece and thus to form rectangular recesses and cuts even in the corners of work pieces." See page 7, lines 14-17 of the original description. Further, page 20, lines 5-15 of the original description explains that "not only can such a groove be formed parallel to the cutting edge (such as the cutting edge 13), but it may also be cut in corner sections thus eliminating the need for work with a chisel or the like." A close reading of Fletcher fails to disclose or suggest a tool to make in work pieces cuts (such as slits) having predetermined widths and being bounded by walls. Appellant provides a device which, in clear contrast to a bone saw of the type called for in Fletcher, can perform work entirely different from that contemplated by Fletcher.

Fletcher discloses that it is concerned with a device which cuts aggressively and forms a kerf and cuts through bone quickly (column 3, lines 44-48). (emphasis added) Fletcher further describes, column 5, lines 47-65, that the kerf 33 is V-shaped, as shown in Fig. 5B. Fletcher provides no disclosure or suggestion which may be interpreted as making cuts having predetermined widths and bounded by walls, as provided in claims 1 and 25. Aggressive and rapid cutting of bone does not include such limitations as found in claims 1 and 25.

Appellant submits that the interpretation of Fletcher, Miller and Fieni to include such limitations reveals hindsight construction, which is impermissible.

As described above, the failure within the prior art to satisfy any single factor of the three-prong test for a prima facie case of obviousness, results in the failure of the prior art to obviate the present claims.

It is clear that neither Fletcher, Miller nor Fieni provides a disclosure or suggestion to support their modification according to the claimed arrangement.

Further, it is clear that the combination of Fletcher, Miller and Fieni fails to disclose each and every element of the independent claims. In particular, the first and second sections of the tool, the step placed between them, and the defined thickness of the fastener are missing from the prior art.

Based on the foregoing, the appellant respectfully submits that Fletcher, Miller and Fieni, separately or combined, fail to teach, disclose, suggest or obviate a tool or manually operable material removing apparatus as claimed in independent claims 1 and 25.

Accordingly, appellant respectfully requests that the rejections of claims 1 and 25 under 35 U.S.C. § 103(a) are withdrawn.

Claims 1 and 25 are allowable.

Claims 2-5

Rejection under 35 U.S.C. § 103(a)

Claims 2-5 are allowable as being dependent from an allowable base claim. While claims 4 and 5 are rejected on the basis of an additional reference, Arntz et al., this reference is cited merely as teaching material removing elements comprising diamonds and corundum. However, Arntz et al. teaches nothing that would remedy the deficiencies discussed about with respect to the rejection of claims 1 and 25.

Claims 6-8

Rejection under 35 U.S.C. § 103(a)

Claims 6 through 8 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Fletcher in view of Miller and Fieni.

Claim 6 is directed to the tool of claim 1, wherein said at least one at least straight cutting edge comprises two adjoining sections disposed at an acute angle to each other.

Claim 7 is directed to the tool of claim 6, wherein said acute angle is between about 1.5° and about 4.6°.

Claim 8 is directed to the tool of claim 7, wherein said acute angle is between about 1.5° and about 2°.

Such an arrangement is depicted in Fig. 7 of the present application, wherein the tips of the teeth are not disposed on the cutting edge 13c along a single straight line. Instead, the cutting edge 13c includes two straight sections 21 disposed at an angle β to each other. The angle β between the straight lines connecting the teeth in each of the sections 21 is a small acute angle. In an arrangement of the character described in connection with and illustrated in Fig. 7, the angle β may range between 1.5° and 2°. In short tools, the angle β is preferably greater than 2° but should be less than 2° in shorter tools. In a blade having a length of 100 mm (as measured between the fulcrum on the axis A and the cutting edge 13c), the angle β is preferably about 4.6°, as described on page 16, lines 12-25.

The present Office Action states that Fletcher teaches that cutting teeth are formed by joining two straight cutting edge sections at acute angles, according to Fig. 2. However, a close reading of Fletcher fails to reveal two or more straight cutting edge sections or acute angles between such sections.

To the contrary, Fletcher, column 4, lines 55-60 discloses that each of the teeth shown in Fig. 1 are formed as isosceles triangles having all tips 6 located on a line T which is tangential to the oscillatory rotation R. The tips 6 terminate on the tangent line T which is perpendicular to the longitudinal axis A of the cutting blade 10. Column 4, lines 65 through column 5, line 7 discloses that Fig. 2 a variant of Fig. 1 in that a plurality of teeth are inwardly directed to create a mirror image of the opposing teeth. However, Fletcher's teeth are provided along a single tangent line T, and no angle is provided between any supposed separate sections of teeth.

Thus, the prior art references fail to disclose each and every feature of claims 6-8. Based on the foregoing, the appellant respectfully submits that Fletcher, Miller and Fieni, separately or combined, fail to teach, disclose, suggest or obviate a tool as claimed in dependent claims 6-8 of the present invention.

Accordingly, appellant respectfully requests that the rejections of claims 6-8 under 35 U.S.C. § 103(a) are withdrawn.

Claims 6-8 are allowable.

Claims 9 and 13-17
Rejections under 35 U.S.C. § 103(a)

Claims 9 and 13-17 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Fletcher in view of Miller and Fieni.

Claim 9 is directed to the tool of claim 1, wherein at least a major part of said elongated member is flat.

Claim 13 is directed to the tool of claim 1, wherein said elongated member is configured with at least one elongated path that facilitates rearward movement, along said path, of material being cut from the workpiece by said cutting edge, as well as removal of the material being cut, and wherein said at least one path is provided by at least one slot that extends between said first and second sections.

Claim 14 is directed to the tool of claim 1, wherein said at least one cutting edge has first and second ends and recessed portions are provided at said ends of said at least one cutting edge intermediate said first and second sections.

Claim 15 is directed to the tool of claim 1, wherein said elongated member has an at least substantially constant width at least between said first and second sections thereof.

Claim 16 is directed to the tool of claim 1, wherein said member has a substantially trapeziform outline.

Claim 17 is directed to the tool of claim 1, wherein said elongated member further comprises a third section disposed between said first and second sections and having a first width, at least one of said first and second sections having a second width different from said first width.

Claims 9 and 13-17 are allowable as being dependent from an allowable base claim.

CONCLUSION

There is no suggestion or motivation to combine or modify the references as done in the rejections. In addition, there is no reasonable expectation of success in modifying the cited references, and the cited references, alone or combined, do not teach each and every element of the independent and dependent claims.

Appellant respectfully requests a timely Notice of Allowance.

Respectfully submitted,

March 3, 2010

/Wesley W. Whitmyer, Jr./
Wesley W. Whitmyer, Jr., Reg. No. 33,558
Todd M. Oberdick, Reg. No. 44,268
ST. ONGE STEWARD JOHNSTON & REENS LLC
986 Bedford Street
Stamford, Connecticut 06905-5619
(203) 324-6155
Attorneys for Applicant

VIII. CLAIMS APPENDIX

1. A tool for making in workpieces cuts having predetermined widths and bounded by walls, in combination with a manually operable apparatus having a power driven output shaft arranged to oscillate about a predetermined axis and a fastener attaching said tool to the output shaft, the fastener having a thickness, said tool comprising:

an elongated member having a rearward first section, with a hole extending through said first section and having a closed rear wall formed by material from which said first section is made, said hole being configured to be mounted on said output shaft with the fastener so that the member extends in a direction at least substantially normal to said predetermined axis; and

a forward second section remote from said first section and including at least one at least substantially straight elongated cutting edge at least substantially normal to said direction and arranged to make in a workpiece a cut having a width which is a function of the extent of oscillatory movement of said output shaft, of the distance from said axis to said cutting edge and of the length of said cutting edge;

wherein said elongated member comprises a step of finite length at least equal to the thickness of the fastener intermediate said first and second sections thereof;

wherein said step of finite length is configured so that said first and second sections of said elongated member extend substantially parallel to each other, so that a plane substantially normal to said predetermined axis defined by said second section is further from the manually driven apparatus than a plane substantially normal to said predetermined axis defined by said first section, whereby the plane defined by said second section is closer to the workpiece during use of the tool than is the plane defined by said first section, and so that said cutting edge extends in the plane defined by said second section.

2. The tool of claim 1, wherein said cutting edge is provided with material removing elements selected from the group consisting of cutting and grinding elements.

3. The tool of claim 2, wherein said material removing elements comprise teeth.

4. The tool of claim 2, wherein said material removing elements comprise industrial diamonds.
5. The tool of claim 2, wherein said material removing elements comprise corundum.
6. The tool of claim 1, wherein said at least one at least straight cutting edge comprises two adjoining sections disposed at an acute angle to each other.
7. The tool of claim 6, wherein said acute angle is between about 1.5° and about 4.6° .
8. The tool of claim 7, wherein said acute angle is between about 1.5° and about 2° .
9. The tool of claim 1, wherein at least a major part of said elongated member is flat.
10. (cancelled)
11. (cancelled)
12. (cancelled)
13. The tool of claim 1, wherein said elongated member is configured with at least one elongated path that facilitates rearward movement, along said path, of material being cut from the workpiece by said cutting edge, as well as removal of the material being cut, and wherein said at least one path is provided by at least one slot that extends between said first and second sections.
14. The tool of claim 1, wherein said at least one cutting edge has first and second ends and recessed portions are provided at said ends of said at least one cutting edge intermediate said first and second sections.

15. The tool of claim 1, wherein said elongated member has an at least substantially constant width at least between said first and second sections thereof.

16. The tool of claim 1, wherein said member has a substantially trapeziform outline.

17. The tool of claim 1, wherein said elongated member further comprises a third section disposed between said first and second sections and having a first width, at least one of said first and second sections having a second width different from said first width.

18-24. (cancelled)

25. A manually operable material removing apparatus comprising a power-driven output shaft arranged to oscillate about a predetermined axis, comprising a tool for making in workpieces cuts having predetermined widths and bounded by walls and a fastener attaching said tool to the output shaft, the fastener having a thickness, said tool comprising:

an elongated member having a rearward first section, with a hole extending through said first section and having a closed rear wall formed by material from which said first section is made, said hole being configured to be mounted on said output shaft with the fastener so that the member extends in a direction at least substantially normal to said predetermined axis; and

a forward section remote from said first section and including at least one at least substantially straight elongated cutting edge at least substantially normal to said direction and arranged to make in a workpiece a cut having a width which is a function of the extent of oscillatory movement of said output shaft, of the distance from said axis to said cutting edge and of the length of said cutting edge;

wherein said elongated member comprises a step of finite length at least equal to the thickness of the fastener intermediate said first and second sections thereof:

wherein said step of finite length is configured so that said first and second sections of said elongated member extend substantially parallel to each other, so that a plane substantially normal to said predetermined axis defined by said second section is further from the manually driven apparatus than a plane substantially normal to said predetermined axis defined by said first section, whereby the plane defined by said second section is closer to the workpiece during

use of the apparatus than is the plane defined by said first section, and so that said cutting edge extends in the plane defined by said second section.

IX. EVIDENCE APPENDIX

None.

X. RELATED PROCEEDINGS APPENDIX

None.